

REMARKS

Claims 2-4, 6-9, and 12 are pending in this application. Claims 2, 3, 6-9 and 12 are amended. Claims 5 and 13 are cancelled.

Applicants respectfully request reconsideration and allowance of the claims in view of the amendments and the following remarks.

CLAIM REJECTION – 35 USC §112

Claims 5 and 13 are rejected under 35 USC §112, second paragraph as being indefinite.

First, the subject matter of claims 5 and 13 have been respectively incorporated into claims 2 and 3. In addition, formula 1 as recited in claims 5 and 13, i.e., “ $M_mL_2X_p$ ” has been amended to “ $M_mL_nX_p$,” thereby overcoming the Examiner’s rejection. Withdrawal of this rejection is respectfully requested.

CLAIM REJECTION – 35 USC §103

Claims 2, 5-9 and 12 are rejected under 35 USC 103(a) as being unpatentable over Chen et al. in view of Clarke et al. Applicants traverse this rejection.

Although the Examiner alleges that Applicants’ arguments are moot in view of the new grounds of rejection, the Examiner’s rejection reason with regard to Chen et al. has not changed from previous Office Actions. Specifically, the Examiner still alleges that Chen et al. teaches all the features of, for example, claim 2, except Chen et al. fails to teach reducing or oxidizing the metal pattern.

Accordingly, the Examiner has ignored Applicants’ argument with regard to the patentability of claim 2. Specifically, claim 2, for example, recites “forming a micropattern

using an organometallic-containing compound.” (Emphasis added.) As presented in Applicants’ argument in the response filed on December 13, 2005, Chen et al. discloses that the catalyst solution includes a polymer carrier, catalyst ions, and solvents. Further, Chen et al. further discloses that the polymer should not complex with the catalyst ions, i.e., metal ions. Column 3, lines 35-60. Chen et al. clearly teaches that a catalyst is not an organometallic-containing compound. In the chemical art, such a difference is significant. For example, NaCl (common salt) is not remotely the same thing as a solution containing Na⁺ and Cl⁻. Chen et al. does not teach an organometallic-containing compound, let alone the specific formula: M_mL_nX_p.

Therefore, even if Clarke et al. teaches an organometallic compound and reducing or oxidizing a metal pattern, because Chen et al. specifically *teaches away* from using an organometallic compound, the combination of Chen et al. and Clarke et al. is not possible. The Examiner has failed to present a proper *prima facie* case of obviousness, because the references fails to provide a suggestion or motivation to combine. See MPEP 2143.02 and 2145(X)(D).

For at least the reasons given above, Applicants submit that claim 2 is patentable over the Examiner’s cited references. Dependent claims 6-9 and 12 are also patentable for depending on an allowable base claim.

Claims 3 and 13 are rejected under 35 USC 103(a) as being unpatentable over IBM Technical Disclosure Bulletin or Hill et al. in view of Chen et al. Applicants traverse this rejection.

As argued above, the Examiner makes the same rejection and provides the exact same reasons, yet the Examiner alleges that Applicants’ arguments are moot in view of new rejection reasons. The Examiner has failed to properly consider Applicants’ remarks with regard to the Examiner rejection reasons (IBM Technical Disclosure Bulletin or Hill et al. in view of Chen et

al.) as presented in Applicants' amendment filed on December 13, 2005. Applicants reiterate arguments presented in the amendment filed on December 13, 2005.

The Examiner admits that that IBM Technical Disclosure Bulletin (Bulletin) fails to "teach electrolessly coating the metal layer." This is because once the organometallic powder is applied to a substrate and the powder is thermally treated, the formation of a wiring pattern (according to the Bulletin) ends. No additional steps are required. The Bulletin on page 2, further discloses that "to build up composite structures", the steps of applying the powder and thermal treatment are repeated. A person of ordinary skill would not have been motivated to combine other teachings of a reduction process or an oxidation process and growing crystals, because the Bulletin teaches that a wiring pattern process is completed after thermally treating the wire pattern.

As admitted by the Examiner, Chen et al. fails to disclose a reduction process or an oxidation process. Therefore, Chen et al. fails to cure the deficiencies of the Bulletin. A combination of the Bulletin and Chen et al. still fails to disclose all the features of the instant claims. In addition, as presented above, Chen et al. discloses that the catalyst solution includes a polymer carrier, catalyst ions, and solvents. Further, Chen et al. further discloses that the polymer should not complex with the catalyst ions, i.e., metal ions. Column 3, lines 35-60. Chen et al. clearly teaches that a catalyst is not an organometallic-containing compound. Chen et al. cannot be combined with the Bulletin, because Chen et al. teaches away from using an organometallic-containing compound. A combination of the Bulletin and Chen et al. fails to disclose all the features of claim 3.

As the Examiner has noted, Hill et al. fails to teach an electrolessly coating process and a reduction process or an oxidation process. For at least the same arguments submitted against

the Bulletin, a combination of the Hill et al. and Chen et al. still fails to disclose all the features of claim 3.



CONCLUSION

In view of the above amendment and remarks allowance of claims 2-4, 5-9, and 12 are respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John A. Castellano at the telephone number of the undersigned below. If the Examiner believes that a personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (703) 668-8000.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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